

# UNCONSCIOUS AGENDAS IN THE ETIOLOGY OF REFRACTORY OBESITY AND THE ROLE OF HYPNOSIS IN THEIR IDENTIFICATION AND RESOLUTION: *A New Paradigm for Weight-Management Programs or a Paradigm Revisited?*

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**Abstract:** Hypnosis has long been recognized as an effective tool for producing behavioral change in the eating disorders anorexia and bulimia. Despite many studies from the latter half of the last century suggesting that hypnosis might also be of value in managing obesity situations, the efficacy of hypnotherapy for weight reduction has received surprisingly little formal research attention since 2000. This review presents a brief history of early clinical studies using hypnosis for weight reduction and describes a hypnotherapeutic approach within which a combination of instructional/pedagogic and exploratory therapeutic sessions can work together synergistically to maximize the potential for sustained weight loss. Hypnotic modulation of appetite- and satiation-associated peptides and hormone levels may yield additional physiological benefits in Type 1 and Type 2 diabetes.

Between 1959 and 2003, more than 40 reports were published specifically describing the use of hypnosis for weight reduction (see [Table 1](#)).

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The studies varied in size from more than 100 participants (Bolocofsky, Spinler, & Coulthard-Morris, 1985; Goldstein, 1981; Johnson & Karkut, 1996; Jupp & Collins, 1985), through smaller trials of 20 to 75 patients, down to those quoting individual case studies (Channon, 1980; Davis & Dawson, 1980; Green, 1999; Hanning, 1975; Munro, 1989; Smith, 1986; White, 1979). Among the earliest descriptions of the use of hypnosis in a medical situation to treat obesity was Brodie (1964) who (rather contentiously) would tell his obese patients that they had the equivalent of a "fat cancer" that had been growing inside them for years and that needed removal by their learning to eat properly through the use of his hypnotic therapy. He claimed great success with this personalized approach to treating over 525 patients, but, as was the case with many of the early studies, Brodie did not employ any control group nor did he publish any numerical data to substantiate this claim, which limits severely any assessment of the true efficacy of his nonconformist approach.

Most of the authors listed in Table 1 employed a sociocognitive or authoritarian approach, utilizing varying combinations of suggestion, imagery, anxiety reduction, aversion, covert sensitization, and self-directed programming to facilitate changes in eating habits, usually with apparent benefit in reducing weight in their subjects. However, a more analytical or exploratory approach was taken by Channon (1980), Gross (1983), Munro (1989), and M. Barabasz and Spiegel (1989), with evident success also. Induction approaches were predominantly progressive relaxation or eye gaze fixation, either in groups or individually, with devices such as hand levitation being used to enhance the depth of hypnosis and hence to increase the benefits of the hypnosis sessions (Goldstein, 1981). Some studies additionally taught participants self-hypnosis and/or provided hypnosis tapes for home use. It is difficult to accurately evaluate the claims made by many of these reports as only 17 out of the 43 studies listed incorporated a control cohort, and in only nine studies were patients followed after their hypnosis-induced weight loss to monitor for weight regain, usually for 6 months or less. Exceptions to this were Bolocofsky et al. (1985) and Stradling, Roberts, Wilson, and Lovelock (1998), who were able to demonstrate maintained weight-loss benefits in their hypnosis cohorts at 24 and 18 months, respectively. Rarely was any formal, or informal, assessment of hypnotizability employed prior to commencing therapy, but, where this was measured, there appeared to be a correlation between such measurements and subsequent weight loss (Andersen, 1985; M. Barabasz & Spiegel, 1989; Jupp, Collins, McCabe, & Walker, 1986; Mewes, Stich, Habermüller, & Revenstorf, 2003; Stanton, 1975), an exception to this being that of Deyoub (1979) who found little correlation between weight loss and the Harvard Scale assessment. Irrespective of the parameters used to assess the resulting success

Table 1  
*Some Early Trials of Hypnosis for Obesity Management*

Authors	Date
Winkelstein	1959
Flood	1960
Wollman	1962
Brodie	1964
Long & Kreykes	1965
Cautela	1967
M. B. Harris	1969
Lick & Bootzin	1971
Janda & Rimm	1972
Hanning	1975
Stanton	1975
Miller	1976
Leon	1976
Aja	1977
Douglas Ringrose	1979
Deyoub	1979
White	1979
Deyoub & Wilkie	1980
Davis & Dawson	1980
Channon	1980
Bornstein & Devine	1980
Wadden & Flaxman	1981
Schramm	1981
Goldstein	1981
Gross	1983
Fawzy et al.	1983
McCabe, Jupp, & Collins	1985
Jupp & Collins	1985
Bolocofsky, Spinler, & Coulthard-Morris	1985
Andersen	1985
Jupp, Collins, McCabe, & Walker	1986
Cochrane & Friesen	1986
Smith	1986
Cochrane	1987
Munro	1989
M. Barabasz & Spiegel	1989
Vanderlinden & Vandereycken	1994
Schaumberg, Patsdaughter, Selder, & Napholz	1995
Platt	1995
Johnson & Karkut	1996
Stradling, Roberts, Wilson, & Lovelock	1998
Green	1999
Johnson & Brinker	2001
Mewes, Stich, Habermüller, & Revenstorf	2003

of hypnotherapy sessions or the length of follow-up posthypnosis or postweight loss, 33 out of 43 (77%) of the papers referenced in [Table 1](#) deemed hypnosis to have been efficacious in enhancing weight loss in their obese patients.

Between 1976 and 2000, at least nine reviews examining or summarizing the benefits of reports and trials such as those above were published (Allison & Faith, 1996; Cochrane, 1992; Heap, 1982; Leon, 1976; Levitt, 1993; Mott & Roberts, 1979; Schoenberger, 2000; D. Spiegel, 1983; Vanderlinden & Vandereycken, 1994; Wadden & Anderton, 1982). While all accepted that there was some benefit from the use of hypnosis in weight-reduction programs, some common themes running through these reviews were the need for more rigorous research with larger cohorts of subjects and the need for selectivity in subject recruitment in order to personalize hypnotic approaches to suit individuals and to maximize the response. Clinical trials of hypnosis for various problems, including obesity, were reviewed by Kirsch and colleagues in two meta-analyses (Kirsch, 1996; Kirsch, Montgomery, & Sapirstein, 1995), which reported that the addition of hypnosis to cognitive behavioral psychotherapy substantially enhanced outcomes for many clinical conditions including obesity (Kirsch et al., 1995). In a later meta-analysis, Kirsch, using recalculated data, demonstrated even larger benefits for obesity treatment, with weight reduction often continuing beyond the end of the treatment period, although other reviews demonstrate the methodological difficulties in using the data from some of these early trials (Allison & Faith, 1996; Schoenberger, 2000).

Several other more recent reviews have confirmed the efficacy of using hypnosis, in particular as an adjunct to cognitive behavioral therapy in weight-reduction programs, including Allison, Fontaine, Heshka, Mentore, and Heymsfield (2001), Hutchinson-Phillips and Gow (2005), and Pittler and Ernst (2005). This same conclusion was reached by Byom (2009) in a study comparing cognitive behavioral psychotherapy alone with cognitive behavioral psychotherapy plus hypnosis, while Prag (2007) in her single case study found this combination useful also for improving self- and body image, even in the absence of significant weight loss. Holt, Warren, and Wallace (2006), M. Barabasz (2007), and Koithan (2009) all make the case for the usefulness of hypnosis for weight reduction, although the paucity of recent published trials means that their opinions are still based on those trials undertaken over 15 years previously. Even the most recent reviews by Hartman (2010), Wickramasekera (2010), and Montgomery, Schnur, and David (2011), while concluding that hypnosis has potential as a weight-management tool, express concern about the problems of small cohort numbers, variations in procedure, different measures of response measurement, and lack of long-term follow-up. A 2006 Cochrane collaboration review of obesity interventions for adults contains reference to only one study using hypnotherapy as a standalone therapy (Shaw,

O'Rourke, Del Mar, & Kenardy, 2006), and, despite the evidence that hypnosis can be beneficial and efficacious for many childhood and teenage problems (M. Barabasz, 2012; Kaiser, 2011; Kohen, 2011; Olness, 2008), a 2009 Cochrane collaboration paper on obesity interventions with children by Oude Luttikuis and colleagues (2009) was unable to find any use of hypnotherapy for this purpose.

Two textbooks by Ernst and colleagues (Ernst, Pittler, Stevinson, & White, 2001; Ernst, Pittler, & Wider, 2006) provided substantial and systematic literature reviews on the perceived efficacy of a wide range of mind-body therapies, including hypnotherapy, for an equally wide range of medical and psychological problems. The editors of these books subsequently proceeded to use the data collected during the preparation of their publications in an attempt to quantify the efficacy of three of these therapies (hypnotherapy, autogenic training, and relaxation therapy) and to monitor any apparent changes in their effectiveness between 2000 and 2005 (Ernst, Pittler, Wider, & Boddy, 2007). The authors derived their "weight of evidence" index based upon the various criteria seen as determining the quality of reported clinical trials; these included whether the report was of a single trial or a meta-analysis, the number of participants in the trial, and the "blinded-ness" of the assessment. For the majority of the clinical conditions examined, all three therapies showed an apparent improvement in their effectiveness between 2000 and 2005, the marked exceptions being alcohol and smoking dependences, where the benefits of hypnotherapy appear not to have improved over the years. There were no figures in the 2000 survey for hypnotherapy being used to treat obesity, but the 2005 index indicated a high weight of evidence for the efficacy of the technique in obesity management (Ernst et al., 2007). A major review of confidence intervals for obesity and hypnotizability correlations by Sapp, Obiakor, Scholze, and Gregas (2007) appears to add weight to the contention that hypnosis either alone or in combination with other therapies is effective in producing weight reduction but that the connection between this weight loss and hypnotizability is still not fully established. This conclusion is in general agreement with that expressed by Flammer and Bongartz (2003) with regard to other, nonobesity hypnotherapy programs.

The relationship between hypnotizability (what was previously referred to as suggestibility) and quality of response in clinical trials including weight-reduction programs has been the source of much conjecture and opinion. Few of the pre-2000 trials investigated the correlation between hypnotizability and weight loss, and the small numbers of participants in many historical trials would have rendered such correlations of doubtful significance, as a recent paper by Montgomery and colleagues (2011) would seem to indicate (see discussion below). Notwithstanding the views of Sapp et al. (2007), there appears to be

some evidence accrued attesting to a degree of correlation between hypnotizability and weight loss (Allison et al., 2001; M. Barabasz, 2007; Mewes et al., 2003), as well as hypnotizability having a significant relationship with a number of behavioral and cognitive eating-associated characteristics such as weight, shape, and dissociation (Hutchinson-Phillips, Gow, & Jamieson, 2007), and playing a role in body self-image malleability (Frasquilho, Oakley, & Ross-Anderson, 1998). Publications such as Lynn and Shindler (2002) and Milling, Coursen, Shores, and Waszkiewicz (2010) have provided further evidence of such correlations, and Lynn, Meyer, and Shindler (2004) have emphasized the value of assessing hypnotizability in some (if not all) clinical environments. This is discussed in more detail below.

## OBESITY AND ITS CURRENT CLINICAL MANAGEMENT

Obesity has become a growing problem over the past 2 decades throughout the Western hemisphere especially but increasingly also within developing countries. The fears of a global epidemic of obesity and how this might be prevented were highlighted by the World Health Organisation (WHO) in 2000 in their lengthy Technical Report No. 894 (WHO, 2000), and these fears have been echoed and amplified by the subsequent wealth of national and world statistics and publications, all attesting to the scale of the growth rate in obesity. The WHO estimated that in 2004 1.6 billion people worldwide would be overweight and at least 400 million would be obese, and these figures were predicted to rise to 2.3 billion and 700 million respectively by 2015 (WHO, 2000). The 2011 prevalence of adult overweight (BMI 25–29.9) in the United States was estimated at around 40%, with a further 30% of the population being obese, that is, BMI >30 (Hurt, Frazier, McClave, & Kaplan, 2011), while figures for the United Kingdom showed an increase in male obesity from 13.6% to 24.0% between 1993 and 2004 and a rise in the incidence for women from 16.9% to 24.4% over the same period (Zaninotto, Head, Wardle, & Mindell, 2009). The latest UK statistics for 2011 from the Information Centre for Health and Social Care (ICHSC) show that the proportion of adults who were overweight including obese increased from 58% to 65% in men and from 49% to 58% in women between 1993 and 2011, and this is predicted to continue to rise (ICHSC, 2013), despite the Department of Health's urgent "call to action on obesity in England" of the same year (Department of Health, 2011).

These figures give some idea of the scale of the problem and of the need for research into approaches that will maximize the benefits of current weight-reduction programs. It is widely accepted that this worldwide increase in the incidence of refractory overweight and obesity arising from an inability to adhere to diet and exercise regimes,

or from weight regain following previous successful weight loss, is consequential to a multifactorial situation involving genetic, epigenetic, prenatal, nurtural, biochemical/hormonal, psychological, psychosocial, and environmental determinants. Obesogenic genes, an obesogenic uterine environment, an obesogenic upbringing, an obesogenic lifestyle, and the easy availability of an obesogenic diet have all been shown to contribute to varying degrees to the likelihood of becoming an overweight or obese child and, in turn, an obese adult with major biochemical and physiological disorders requiring long-term medical and social support (Freeman, 2010; Spruijt-Metz, 2011). Most of these obesogenic factors have been, or are becoming, clearly identifiable and mapped (Vandenbroeck, Goossens, & Clemens, 2007) and their impact quantifiable, if not always acknowledged or avoidable (Hruschka & Brewis, 2013; Levine, 2011; Shawky & Sadik, 2012; Zimmerman, 2011). Less well understood, however, are the emotional, psychological, and psychodynamic concomitants that influence eating behavior and weight maintenance, necessitating a behavioral approach in their management (Allison & Baskin, 2009; Chivers, 2011; Fitzgibbon, Blackman, & Avellone, 2000; Pettigrew, Pescud, & Donovan, 2012; G. T. Wilson, 2010) and for which an intervention such as hypnotherapy would appear to be the most appropriate route to their modulation and amelioration.

Current efforts to address society's increasing problem of overweight and obesity through weight-reduction programs, both in the commercial sector and in primary care and National Health Service (NHS) settings, continue to focus predominantly and quite rightly on diet and exercise regimens. Only scant attention may be directed towards emotional support and behavioral modification, and as a result perhaps, such programs rarely achieve the long-term success that the organizers of such weight-reduction programs would wish (Chambers & Swanson, 2012; Lehnert, Sonntag, Konnopka, Riedel-Heller, & König, 2012; Stubbs & Lavin, 2013). Increasingly therefore, such programs are incorporating behavioral techniques such as motivational interviewing, relaxation and meditation, cognitive behavioral psychotherapy, and mindfulness into the structure of such programs as a means of enhancing motivation, and Wing et al. (2008) and Spahn et al. (2010) have explored some of the behavioral factors that appear to mediate long-term maintenance of weight loss. However, although such factors may be relevant in helping to making attending weight-management programs more efficacious by reducing anxiety and in rallying participants' enthusiasm to change their lifestyles, as Cooper et al. (2010) have suggested, rarely do they have much long-term benefit with regard to the maintenance of long-term weight loss; nor do these therapies appear to have easily identifiable influences on motivating behavioral change towards a healthy lifestyle (Papandonatos et al., 2012). Furthermore, none of these approaches would appear to have the capability or the power to detect

and to change intrinsically obesogenic unconscious motivational patterns. Nor do they have the ability to explore for subconscious barriers and agendas that might be acting to inhibit weight loss and to promote weight regain after the cessation of an apparently successful weight-reducing program, as Byom (2009) and others (Barte et al., 2010; Cooper et al., 2010; Moldovan & David, 2011) have shown. Such simple cognitive or *pedagogic* approaches are clearly not of sufficient power to influence those subconscious mechanisms that may be influencing or impeding weight loss and long-term weight management.

This is supported by evidence from a recent focus-group study of an NHS weight-management program undertaken by one of the authors (Webb, Davies, Johnson, & Abayomi, 2012), which demonstrated that, even after completing a well-designed and orchestrated weight-management program incorporating aspects of behavioral advice and support, many overweight or obese individuals still lacked the insight and the degree of motivational impetus and subconscious facility necessary to successfully manage the “energy in versus energy out” equation that will determine their future weight and health. Despite having acquired new knowledge about food selection, quality, cooking, and apportioning, practical advice on the benefits of physical activity, and a considerable degree of ego-enhancement from peer-group support, participants demonstrated only limited evidence for their having acquired any emotional intelligence or new psychological strengths that would enable them to move with confidence from their immediate postprogram euphoria into the harsh reality of the outside world. As a result most expressed fears about not being able to maintain an appropriate level of a healthy lifestyle beyond the end of the program. All participants had experienced failure or only limited success with previous weight-reduction attempts but appeared to have gained little new insight as to why this was (Webb et al., 2012). Clearly, therefore, there is a need for the inclusion of a therapeutic approach powerful enough to be able to help participants to identify and modulate unhelpful subconscious patterns of thinking concerning body weight, size, and shape.

In many areas of medicine and psychology, it has become apparent that unconscious agendas and decisions, usually based upon past traumas and developmental events, can engender disease and discomfort states, as well as impairing movement in the direction of the restoration of health (Brann, Owens, & Williamson, 2012; Heap, 2012; Lynn & Kirsch, 2006; Nash & Barnier, 2008). There is no reason, therefore, to assume that refractory obesity is exempt from having etiologies derived from such hidden unconscious barriers. With its long and respected history of utility in many health and medical arenas, and, notwithstanding the limitations highlighted above, hypnotherapy’s apparent ability to demonstrate a substantial degree of efficacy in the treatment of obesity

in many of the trials between 1960 and 2000 (see [Table 1](#)), this is a technique that would seem to have the facility to maximize weight loss and to reduce subsequent weight regain if employed in current weight-management programs.

## HYPNOTHERAPY—THE UNIVERSAL SOLUTION TO OBESITY?

A conventional Internet search for information on weight loss through hypnosis produces in excess of 12 million pages, including over 100,000 entries for hypnotic gastric banding and 1,500 books on hypnosis or self-hypnosis for weight management. New books advocating hypnosis for weight reduction and other health problems, intended for popular lay use, also continue to appear, with over 20 between 2010 and 2012. This all presents the picture that problems with obesity and overweight are an obvious and easy target for hypnosis and hypnotherapists to deal with, precisely the impression that those practitioners and clinics providing private hypnotherapy services would wish to engender, whether or not this picture truly reflects the efficacy of hypnotherapy in alleviating weight and obesity problems. However, in looking for justification for this encouraging picture, a more formal and robust search for academic publications reporting weight-loss trials of hypnosis over the last 40 years leads to less than 1,500 entries, of which around 60 report genuine scientific or medical accounts of hypnosis being used in obesity situations (as reviewed above). Some of these are small-scale or anecdotal reports from 15 or more years ago, while others are reviews or citations of earlier papers usually reporting positive or encouraging results for the efficacy of hypnotherapy in obesity and weight management. Furthermore, a search for more recent academic publications from the past 5 years yields only 12 papers, of which only three are scholarly papers reporting current studies on hypnosis and obesity during 2010–2012. This all suggests that hypnosis is not perceived by the scientific and medical community as any sort of magic bullet for alleviating the current obesity crisis.

This marked dichotomy of opinion, a flourishing of commercial weight-directed hypnotherapy services contrasted with a dearth of contemporaneous scientific and clinical research interest, would seem to arise from four distinct factors. First, there is the increasing popularity of commercial hypnotherapy amongst the lay population—seen by those disillusioned by the NHS and formal medical services as a therapy for all medical and emotional ills, and on the other hand as an available career option in current times of economic crisis and low employment availability—as any cursory Internet search will demonstrate. Recent surveys by Hunt et al. (2010) and P. E. Harris, Cooper, Relton, and Thomas (2012) have demonstrated that increasing numbers

of the population are exploring complementary and alternative medical services, including hypnotherapy, for their physical and emotional problems and that there are many others therefore prepared to provide this service. Second, there is the growing problem of obesity, evidenced by Nguyen and El-Serag (2010), Hurt et al. (2011), Zimmerman (2011), and many others, among all ages and all social levels of the population, many of whom have experienced the rigors of other, more conventional, diet- and exercise-based programs, and who are aware of the low success for these in achieving long-term sustainable weight-loss benefits (Barte et al., 2010; Stubbs & Lavin, 2013). Many of these weight-troubled individuals may turn to hypnosis either as an “easy” option to their problems or in a last, desperate attempt to find a weight-loss method that will work for them.

The important third factor that undoubtedly contributes to the lack of recent scientific and medical trials of hypnosis, as Askay, Patterson, and Sharar (2009) have pointed out, is the very nature of hypnotherapy treatment itself, which requires time, facilities, and specialist training. This tends to make hypnosis less suitable and not cost effective enough for large-scale group therapy and more relevant, therefore, to individual, one-to-one settings such as are provided by private therapists and many commercial agencies and clinics. A fourth and final factor might be the reputation that hypnosis has had in the past for many scientists and clinicians, for whom, as Upshaw (2006) has suggested, hypnosis has always been a “dirty word.”

However, the increasing number of clinical textbooks and papers attesting to the validity and efficacy of the hypnotherapeutic approach for many physical and emotional disorders is evidence of a “sea change” in attitude that is tending towards giving hypnosis a more respectable and accepted image (A. F. Barabasz, Olness, & Boland, 2009; Brann et al., 2012; Heap, 2012; Lynn & Kirsch, 2006). Nevertheless, as Hunt and Ernst (2009) have indicated, there still remains a significant absence of valid scientific evidence offered as to the efficacy of hypnotherapy for weight control. This is the case even among those alternative medicine societies and professionals who frequently oversee and underpin the commercial and lay promulgation, propagation, and presumably uptake, of hypnosis by a general public, attempting to manage their weight and obesity problems—and whom these authors accuse of exhibiting “double standards” (Hunt & Ernst, 2009). In the face of this discrepancy, there is clearly a need for further robust scientific research to help clarify the situation and hopefully to establish hypnotherapy as a respectable, evidenced treatment for obesity. This article is offered as a plea for such research to be undertaken, and the authors present themselves as advocates for serious concern to be devoted towards reclaiming hypnosis as a valuable tool in the management of an increasingly urgent medical and social problem.

## THEORETICAL BASIS FOR HYPNOSIS IN OBESITY TREATMENT

What is being proposed in this article is that hypnosis can work in two ways to change eating behavior, to enhance and maintain long-term weight reduction, and hopefully to bring about concomitant physiological and biochemical change that would reduce the risk of obesity's frequent comorbidities such as Type 2 diabetes and cardiovascular disease. First, via sociocognitive mechanisms, collusion between the subject and the authoritarian personality of the hypnotist during trance can be used to facilitate the delivery of repeated and deep-seated hypnotic instructions (Kirsch & Lynn, 1998; Pekela et al., 2010). Through cognitive mechanisms such as suggestion, visualization, ego-enhancement, and similar, such instructions about leading a healthy lifestyle, eating sensibly, and exercising regularly can become a powerful and constant reminder, an inner voice or "pseudo conscience," prompting individuals each time they feel an inappropriate desire to eat too much or of the wrong sort of food. This approach would be most effective where the overweight problem is of a relatively short-term nature, or the result of a change in circumstances such as a prolonged period of enforced inactivity, or retirement from active working, where the diet-to-physical-activity ratio has become unhealthily skewed. Similarly the pedagogic nature of the nonstate hypnosis approach should prove effective where there is evidence to suggest that the obesity is the result of habitual or addictive overeating, a phenomenon the existence of which is still a subject of great debate (see Gearhardt, Corbin, & Brownell, 2009; Gibson, 2006; Gold, Graham, Coccores, & Nixon, 2009; G. T. Wilson, 2010). Using hypnotherapy to change behavior and habits in this way is likely to benefit a high percentage of those individuals with short-to-moderate-term overweight problems, who experience difficulties in maintaining their attendance at programs or in becoming motivated towards healthy eating and exercise.

The second and perhaps most radical approach toward bringing about behavioral change through the application of a hypnotherapeutic approach comes from the perspective of the dissociation or alternate state hypothesis (E. R. Hilgard, 1991), as exemplified by the seminal clinical work of Hartland (1971), Erickson (1980), and Rossi and Cheek (1988), where refractory overweight and obesity can be perceived as resulting from some inner unconscious agenda or barrier against losing weight or against any significant change in body size or shape. In this scenario, unconscious controls are posited as acting to maintain the status quo weight, body size, and self-perceived body shape by inhibiting diet and exercise planning and commitment, thus thwarting weight-reduction attempts. This in the face of these same obese individuals' conscious awareness of the nonideality and aesthetically unsatisfactory nature of their physical appearance, and their conscious

desire to change this and in defiance of the clear health risks attached to their excessive body weight and fat. For these individuals, in addition to the above overt genetic, biochemical, and environmental factors acting to increase weight and to maintain an overweight status, there are other more covert and unconscious factors operating, which may prove to be even more potently obesogenic. It is one of the author's (PAE) contention that such subconscious barriers can become part of an individual's defense mechanisms and, as such, a protection from perceived harm. They are the result of internal, executive decisions made on the basis of subconscious agendas about the need to preserve weight or body size or self-image and decisions that have been generated as a result of traumas, unpleasant experiences, or inappropriate decision making during early childhood through to adolescence.

Weight, size and shape, and body self-image can all become variously and unconsciously linked to painful events in earlier life, to which Sack, Boroske-Leiner, and Lahmann (2010), Feusner, Neziroglu, Wilhelm, Mancusi, and Bohon (2010), and others have pointed. Such events may be perceived by the individual as having been dealt with at that time, and any emotional links with their weight or self-image has subsequently become forgotten. These events, however, may have triggered decisions about how to handle future situations that are (or are perceived as) of the same nature or affording the same threat as the original and long-forgotten traumatic events. It has been observed that childhood physical and sexual abuse, in women especially, is often associated with refractory obesity and metabolic syndrome (Midei, Matthews, Chang, & Bromberger, 2013; Noll, Zeller, Trickett, & Putnam, 2007; Williamson, Thompson, Anda, Dietz, & Felitti, 2002) and can result in adverse reactions to bariatric surgery (Mamun et al., 2007; Steinig, Wagner, Shang, Dölemeyer, & Kersting, 2012). A review by Vámosi, Heitmann, and Kyvik (2010) has highlighted the fact that stress, abuse, and emotional trauma during childhood appear to predispose one towards adult obesity, not least because of the learned use of eating as a comfort response, which then continues into adulthood; and a similar picture was found in a brief survey by Brooke and Mussap (2013).

Where such a subconscious repository of inner agendas is present, it will be active right from the start of commencing each and any weight-reducing program, and its contained emotional cul-de-sacs may act to impede all conscious efforts to do what is necessary to lose weight. Past emotional history and the associated subconscious connections can also engender unrealistic future life expectations and attainments that will result from weight loss or a new body image (Teicher et al., 2010). These inner histories and body narratives, by becoming an integral part of the mind-body relationship, come to constitute the "storied bodies and storied selves" described by Sparkes (1999); narratives that may raise

expectations that weight loss or change in body shape or size will lead to an exciting new career, a new partner, job promotion, or a glamorous media opportunity—"If I can gain a new slim body, my whole life will change." When weight loss does not prove as life changing as expected nor opens such doors as were unconsciously envisaged would be opened, then the benefits of losing weight may feel hollow and meaningless, and old eating habits and a sedentary lifestyle return, as does the weight previously lost.

Societal and cultural norms about body shape and size can also become similarly embedded and act as subconscious imperatives that may be refractory to simple cognitive behavioral modulation. Images of idealized body size and shape have varied greatly over the history of civilization, from the seventeenth-century "plumpness" of the Rubenesque to the 1920s androgyny of "the Flapper" (Brown, 2012; J. Entwistle, 2000) and still do vary across cultures and communities (Fitzgibbon et al., 2000; McCabe, Waqa, Dev, Cama, & Swinburn, 2013). Such internalization of societal ideals can establish a further hurdle to easy weight-orientated behavioral change. In all of these various circumstances, excessive weight or aberrant body image can come to serve a defense or adaptive function (Faden, Leonarda, O'Reardona, & Hanson, 2012), which a pedagogic sociocognitive hypnosis approach may be relatively ineffectual in fully resolving. However working from a "state" or "dissociation" perspective of hypnosis, it is possible to explore these hidden stories using imagery and regression sessions, which can be instrumental for many patients in bringing such potentially deleterious psychological undercurrents to the surface, where they can be examined and processed in a safe environment.

One of the authors (PAE) has worked with hypnotherapy for over 25 years in several clinical areas, most notably that of infertility, and has become aware of how often, hitherto unexplained, infertility is linked, to the patient's complete surprise, to a past and often totally unremembered event. For some infertile patients, hypnotic regression revealing how emotions concerning past relationship problems, previous miscarriages, abortions, or adoptions, thought to have been resolved, have continued to impact on their current emotional fertility, comes as a surprise, but the connections and linkages once brought into conscious awareness, appear logical and obvious. For others however, the revelation that, as young children, they have internalized an interpretation of an early childhood mother/daughter problem, the birth of a sibling, the death of parent or sibling, or even some relatively innocuous event, as a subconscious justification for their never having their own children, can prove astonishing to the now adult patient desperately trying to conceive (P. A. Entwistle, 1988; P. A. Entwistle as cited in Bradford, 1990; P. A. Entwistle & Murray, 1988).

## A CASE STUDY

A brief vignette may help to illustrate the principle and the practice of using hypnotherapy in obesity treatment. Some years ago, a patient was referred to one of the authors (PAE) seeking help with her overweight problem. This 38-year-old female teacher with two children had been overweight since the birth of her first child 12 years earlier and presented with a BMI of 34 and a history of repeated unsuccessful attempts to lose weight using conventional diet and exercise programs. As a child and teenager, she was of normal weight and slim shape and had never needed to worry about her eating habits or undertake any programmed exercise. Only with the birth of her first child did her weight begin inexorably to increase. On the assumption that her weight gain was simply the result of changes in eating habits and daily routine since ceasing work and becoming a mother, a simple program of relaxation sessions coupled with hypnotherapy incorporating visualizations directed at healthy eating, exercise, and a healthy lifestyle—the standard motivational, pedagogic approach of the sociocognitive hypnotist—was initiated. Quite quickly, however, it became apparent that there was more to this situation than merely poor eating and exercise habits. Despite insisting that she was anxious to lose weight and that she was enjoying her sessions, the young woman repeatedly forgot her appointments or cancelled them at the last minute on vague health grounds, such as headaches or stomach upsets. She also mislaid several copies of her self-hypnosis tapes provided for her to use between sessions. As a result there were often long gaps between her attendances, during which time her husband would contact the practice to apologize on her behalf and to urge the practice not to give up on her.

This was all highly suggestive of unconscious mechanisms generating an avoidance of behavioral change, it was felt, and, at a case review, it was explained that it might be time to move to a more exploratory approach with hypnosis sessions using age regression to investigate whether there was some inner, unrevealed motivation for her inability to respond to simple “instructional” hypnosis. With the patient’s agreement these were commenced and, by the third session, she was able to regress spontaneously to a previously unremembered episode when, at 6 years old, she had a bad fall at school necessitated her attending hospital for examination and suturing. The school were unable to contact her mother to accompany her but fortunately had an emergency contact phone number for a neighbor, the mother of a classmate, who came over to the school, went with the child to the hospital and then comforted the distressed little girl until her mother returned from work totally unaware of what had happened to her daughter. As luck would have it, this kindly and motherly neighbor was an obese woman, in contrast to the little girl’s own mother, who was of normal weight and

slim. As a result the little girl came to the (fallacious) conclusion that “fat” mums are always around to look after you when you need them, whereas “slim” mums are not and that “when I am grown up and have my own children I am going to be a ‘fat’ mum who looks after her children and is always there when they need her.” Had she been able, at the time, to verbalize this childish conclusion to her mother, to the neighbor, or to another adult, it would have been countered and would never become a future problem. But as this did not happen, the need to be fat once you become a mother became embedded into her psyche, remaining unrecalled in her unconscious mind for 20 years, to emerge as an imperative once she had her first child. Subsequent to these sessions and their revelation, the patient was able to quickly and easily lose weight down to a BMI consistently below 23, and at the last time of contact, 6 years later, she had continued to maintain this weight effortlessly and confidently.

## DISCUSSION

Whichever theory of hypnosis, the “State” or the “Nonstate,” or something in between (Kirsch, 2011; Kirsch & Lynn, 1998; Lynn & Green, 2011), ultimately comes to most closely approximate the “true” explanation for the hypnotic phenomenon, this will not invalidate the premise suggested above, as these two hypnotic approaches are not mutually exclusive and work well in tandem together. Clinical hypnotherapy is alive and well, as Lynn, Kirsch, Barabasz, Cardeña, and Patterson (2000), A. F. Barabasz and Perez (2007), Mende (2009), Brann et al. (2012), Heap (2012), and Lynn, Malaktaris, Maxwell, Mellinger, and van der Kloet (2012) have all demonstrated, even if, as Heap (2011, 2012, 2013) has suggested, the clinical application of hypnosis has continued doggedly to follow the historical traditions of Erickson and Hartland in the face of the vast amount of knowledge being accrued about the theoretical, psychological, biochemical, and neurophysiological basis of the hypnotic phenomenon. Current clinical practice continues to employ a combination of instructional/pedagogic hypnotherapy sessions and exploratory therapeutic sessions, according to the perceived clinical need and symptomology. This approach appears to provide clear and evidence-based proof that the two modalities can work together synergistically to maximize the benefits of a hypnotherapeutic treatment designed to ensure that the conscious and the subconscious minds are working efficiently together towards a more healthy lifestyle.

In addition to weight loss, other physiological benefits may accrue from this hypnosis approach such as improvements in lipid and glucose metabolism, reducing medication needs for Type 1 and Type 2 diabetics

(Xu & Cardeña, 2007), and the modulation of appetite- and satiation-associated peptides and hormones levels (Dimsdale & Herd, 1982). Such changes may arise indirectly from the reduction in body weight and adipose tissue but may also be generated more directly through psychoneuroimmuno and psychoneuroendocrine mechanisms in ways implied in publications by Hildebrandt, Reutter, Arck, Rose, and Klapp (2000), Barber (2008), Hall, Stanton, and Schultheiss (2010), Messina et al. (2011), Pence et al. (2012), and Fang et al. (2012). Independent of any such physical and biochemical parameters of response to hypnosis- (or even to nonhypnosis behavioral) mediated changes are the emotional and psychological benefits that have been reported, even in the absence of substantial formal weight loss (Appleton, 2013; Friedman, Reichmann, Costanzo, & Musante, 2002; Jupp, Collins, McCabe, Walker, & Diment, 1983; Prag, 2007; Wright et al., 2012). Such changes come presumably from an acceptance of body size, shape, and self-image as a result of the resolution of subconscious pressures and ambiguities, leading perhaps to a decision to remain “healthily overweight” as Vanderlinden (2001) and Grave et al. (2012) have discussed.

Early studies and subsequent reviews have highlighted the deficiencies of uncontrolled trials of obesity in weight-loss management. The design of research projects utilizing hypnosis requires careful consideration regarding experimental design and in the choice of selection and eligibility criteria for hypnosis (Iphofen, Corrin, & Ringwood-Walker, 2005), and this is especially the case in the management of any control groups. Hypnosis is not for everyone and cannot be made mandatory—one cannot be forced into being hypnotized, as this could be perceived as “brain-washing.” Becoming involved in a hypnotherapy program has to always be voluntary, and all hypnotherapy participants, whether in the laboratory, in the clinic, or on stage in the theatre, being self-selected, constitute a different psychological cohort from those who choose not to volunteer. Indeed this need to volunteer or seek out hypnotherapy can often be an important signifier of a subconscious need for therapy (or to be in the limelight!). Ideally therefore, control or nonintervention groups in hypnotherapy trials, irrespective of the clinical modality being investigated, should be chosen from within the volunteer group, as there may be significant differences between the psychodynamic makeup and receptivity between volunteers and nonvolunteers in any participant group. This difference can increase further during the preliminary assessment stages of participants in a proposed hypnosis program due to the phenomenon of “waking hypnosis” where information is absorbed and processed outside of the formal trance induction setting (Capafons, 2004; Wark, 2011). As Crabtree (2012) puts it:

[T]he demand characteristics to which the hypnotic subject is responsive are not only those that occur in the laboratory or the consulting room.

They are at work forming the individual's expectations long before he or she becomes part of those situations. (p. 310)

However, with the above provisos born in mind, nonvolunteers can be a useful group to study in their own right as part of a hypnotic trial.

Populations of individuals can express a wide range of hypnotizability during both sociocognitive and dissociative hypnosis sessions, which might influence the acceptability and potency of suggestions for behavioral change and the ease with which inner and unaware psychodynamics can be unraveled and processed. Consequently a compendium of different scales has been devised for the assessment and quantitation of hypnotizability in the clinical and laboratory arenas (Barnes, Lynn, & Pekela, 2009; Elkins, Fisher, & Johnson, 2012; J. R. Hilgard & Hilgard, 1979; Kumar & Farley, 2009; H. Spiegel & Spiegel, 1978; S. C. Wilson & Barber, 1978), all with their various advocates, as reviewed by Barnier and McConkey (2004). Opinions differ widely as to the relevance of, and the necessity for, prehypnosis screening of participants undergoing therapeutic hypnosis; as well as about the degree of correlation obtainable between measured hypnotizability and subsequent observed or subjective improvements in symptomology and clinical response.

Montgomery et al. (2011) in their meta-analysis of hypnosis obesity trials concluded that hypnotizability accounted overall for only 6% of variance and that larger values were only found in small and medium trials or in those trials on children, which tended to bias the apparent benefits of suggestibility testing. These authors questioned therefore both the need for, and the value of, pretesting for hypnotizability in clinical contexts, feeling that this could be counterproductive as such testing could take more time than the therapy, patients may become irritated or concerned about some of the items in testing procedures, and "poor" responders may be put off and try less well. From an analysis of the impact of sample numbers on effect size in the 10 hypnotherapy studies, the authors concluded that good validity in hypnosis trials requires a minimum of 132 participants per trial, a requirement that was not met by many of the older reported trials (Montgomery et al., 2011). Lynn and Shindler (2002), however, suggest that hypnotizability screening, despite its methodological limitations, can still provide clinicians with a wealth of valuable information, and they counsel for some degree of hypnotizability screening to become routine. Part of the problem may be that hypnotizability remains an elusive concept, within the clinical arena as much as in the laboratory, being variously associated with (but not always correlated with) absorption (Kirsch & Braffman, 1999; Tellegen & Atkinson, 1974), suggestibility both nonhypnotic and hypnotic (Dienes et al., 2009; Kirsch & Braffman, 1999, 2001; Kirsch et al., 2011; Meyer & Lynn, 2011; Milling et al., 2010; Raz, 2011; Raz,

Kirsch, Pollard, & Nitkin-Kaner, 2006; Santarpia et al., 2010; Schweiger Gallo, Pfau, & Gollwitzer, 2012; Wagstaff, 2012), expectancy (Kirsch & Braffman, 1999; Koep, 2012; Lynn & Shindler, 2002; Pekela et al., 2010; Meyer & Lynn, 2011; Schweiger Gallo, Pfau, & Gollwitzer, 2012), depth of hypnotic trance (Pekela et al., 2010; Wagstaff, 2012), and dissociation (Bell, Oakley, Halligan, & Deeley, 2011; Cardeña & Weiner, 2004; Fassler, Knox, & Lynn, 2006).

Additionally, the depth of the hypnotic state can vary from occasion to occasion within the same individual, as induct-ability tends to move in and out of ease for quite long periods of time over a prolonged series of sessions, for reasons relating to changes in subjects' life circumstances, health, or emotional state. There is often a time and a tide for subconscious change to take place that cannot always be influenced by the subject's or the therapist's *conscious* minds, nor even by the therapist's use of the *magic* word "hypnosis" (Gandhi & Oakley, 2005). All of these individual factors together will influence strongly which individuals choose a hypnotherapy route in any weight management group, at any particular time, and how successful this proves to be.

## CONCLUSION

Influencing a person to change their behavior is notoriously difficult, as it requires changing covert internal motivations and agendas in an unconscious mind that can at times be as recalcitrant and recidivist as can the conscious mind. The authors of this article suggest that hypnotherapy, when used as an adjunct in obesity treatment, may be an approach with sufficient power and efficacy to achieve these necessary subconscious motivational changes, and that the incorporation of regular hypnosis sessions into weight management programs could yield clear benefits for the participants involved, both in maximizing their motivation to remain in these programs and in their making full use of the skills and efforts of the health professionals involved. Motivation for change in obesity management, however, is not just about change in diet and/or exercise modalities but also about recognizing what else needs to change and having the courage to change this. This might entail reviewing every aspect of daily life in order to make room for the new lifestyle pattern needed for effective weight loss or maintenance, as the effective management of family, work, and leisure is often an essential prerequisite for managing one's weight.

The increasing public visibility of overweight and obesity over the past two decades, despite the increasing awareness of the health problems that accrue from carrying around too much body fat, demonstrates that health and appearance are not always the most potent forces for determining body shape and size. For many individuals

with particular obesity problems not readily responsive to standard educative approaches, there may be an inner, psychological drive that is not responsive to simple pedagogy and common sense formulas but that necessitates a hypnotherapeutic approach to elucidate. Without appropriate therapeutic help, this deleterious psychological “undertow” is likely to remain in the unconscious realm of many individuals with refractory obesity, and these individuals are likely to perpetuate their repeated cycles of weight loss and weight regain. One therapeutic approach that would appear to have the facility and the power both to identify and to resolve such unconscious barriers and agendas would seem to be hypnotherapy. There is an urgent need therefore to capitalize on the wealth of early clinical studies from 15 years ago and more that appear to be validating hypnosis as an effective tool for the treatment of obesity, through the institution of robust research programs re-examining hypnosis in light of more recent knowledge about the hypnotherapeutic process and its psychological, neurological, and physiological concomitants. Only then perhaps can hypnotherapy begin to assume a respectable and an accepted place in the armamentarium of interventions for weight and obesity management.

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**Unbewußte Vorstellungen in der Ätiologie refraktärer Übergewichtigkeit und die Rolle der Hypnose bei deren Identifikation und Auflösung : Ein neues Modell für Gewichtsreduktionsprogramme oder ein Modell unter neuen Aspekten ?**

**Paul A. Entwistle, Richard J. Webb, Julie C. Abayomi, Brian Johnson, Andrew C. Sparkes und Ian G. Davies**

**Abstrakt:** Hypnose ist schon lange als effektives Werkzeug in Bezug auf Verhaltensveränderungen bei Essstörungen wie Anorexie und Bulimie anerkannt. Trotz vieler Studien der zweiten Hälfte des vergangenen Jahrhunderts die zeigten, daß Hypnose auch ihren Wert in Bezug auf das Management von Übergewichtigkeit hat, wurde der Effizienz der Hypnotherapie in Bezug auf Gewichtsreduktion seit 2000 überraschend wenig formelle Untersuchung beigemessen. Diese Übersicht

bezieht sich auf eine kurze Geschichte früherer klinischer Studien, in denen Hypnose zur Gewichtsreduktion eingesetzt wurde, und beschreibt einen hypnotherapeutischen Ansatz in dem eine Kombination von erzieherischen/pädagogischen und erforschenden/untersuchenden therapeutischen Sitzungen synergistisch zusammenarbeiten können, um das Potential anhaltender Gewichtsreduktion zu maximieren. Die Veränderung von Peptiden und Hormonen durch Hypnose, die mit Appetit und Sättigung assoziiert sind, könnten zusätzliche physiologische Vorteile bei Typ 1 und 2 Diabetikern beherbergen.

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Intentions cachées dans l'étiologie de l'obésité réfractaire et le rôle de l'hypnose dans leur identification et leur résolution : Un nouveau paradigme pour les programmes de contrôle du poids ou un paradigme révisé?

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Résumé: L'hypnose est depuis longtemps reconnue comme un outil efficace pour induire un changement de comportement dans les troubles alimentaires d'anorexie et de boulimie. Malgré de nombreuses études durant la deuxième moitié du siècle dernier donnant à penser que l'hypnose pourrait aussi s'avérer utile pour gérer des situations d'obésité, l'efficacité de l'hypnothérapie pour la perte de poids a paradoxalement suscité peu d'attention depuis 2000 au chapitre de la recherche formelle. Cette revue présente un court historique des études cliniques préliminaires recourant à l'hypnose pour la perte de poids et décrit une approche hypnotherapeutique au sein de laquelle un ensemble de séances d'instruction, de séances pédagogiques et de séances thérapeutiques exploratoires peuvent contribuer de façon synergique à optimiser les possibilités de perte de poids soutenue. La modulation hypnotique des niveaux de peptides et d'hormones associés à l'appétit et à la satiété peut engendrer des avantages physiologiques additionnels pour le diabète de type 1 et de type 2.

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Agendas inconscientes en la etiología de la obesidad refractaria y el rol de la hipnosis para su identificación y resolución: ¿Un nuevo paradigma para los programas de manejo de peso o un paradigma revisado?

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Resumen: Desde hace mucho se ha reconocido que la hipnosis es una herramienta eficaz para producir cambios conductuales en trastornos alimenticios como anorexia y bulimia. A pesar de los muchos estudios realizados en la segunda mitad del último siglo sugiriendo que la hipnosis podría ser valiosa para el manejo de situaciones de obesidad, la eficacia de la hipnoterapia para la reducción de peso ha recibido, sorprendentemente, poca atención

en investigaciones formales desde el 2000. Esta revisión presenta una breve historia de los primeros estudios clínicos que utilizaron la hipnosis para reducción de peso y describe un acercamiento hipnoterapéutico en el cuál una combinación de sesiones instructivas/pedagógicas y exploratorias pueden trabajar sinérgicamente para maximizar el potencial de una pérdida sostenida de peso. La modulación hipnótica de péptidos y niveles hormonales del apetito y la saciedad pudiesen producir beneficios fisiológicos adicionales para la diabetes tipo 1 y 2.

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